

IN THE CLAIMS:

Please amend the claims in accordance with the following claim listing. This listing of the claims replaces and supersedes all prior listings:

1. (Canceled)
2. (Currently Amended) The method of claim [[43]] 50, wherein at least two of said plurality of processing elements are updated at different speeds.
3. (Canceled)
4. (Previously Presented) The method of claim 2, wherein one of said at least two of said plurality of processing elements operates at an acquisition speed and another of said at least two of said plurality of processing elements operates at a display speed, and wherein the acquisition speed is higher than the display speed.
5. (Original) The method of claim 2, wherein said at least two of said plurality of processing elements are idle when not updated.
6. (Previously Presented) The method of claim 2, wherein one of said at least two of said plurality of processing elements is of a cumulative type running at a first speed, and another of said at least two of said plurality of processing elements is of a non-cumulative type running at a second speed, and wherein the first speed is higher than the second speed.
- 7-10. (Canceled)

11. (Currently Amended) The method of claim ~~[[43]]~~ 50, wherein one of said plurality of processing elements requests data from an upstream source when data is requested from it by a downstream processing element.

12. (Canceled)

13. (Currently Amended) The method of claim ~~[[43]]~~ 50, wherein at least one of said plurality of plural processing elements receives M inputs on an input pin and produces N output results on an output pin, where M is an integer equal to or greater than 1 and where N is an integer equal to or greater than 0.

14-42. (Canceled)

43. (Currently Amended) ~~A~~ The method of claim 50, whereinfor configuring and performing processing in a digital oscilloscope processing apparatus, comprising the steps of:

- ~~—receiving one or more input parameters;~~
- ~~—defining a plurality of processing elements based upon said received one or more input parameters, each of said plurality of processing elements adapted to receive waveform data and to process the received waveform data in accordance with said corresponding input parameters, and less than all of said processing elements having~~ have update inputs- input pins activated to process the waveform data received thereby; and

~~graphically connecting said plurality of processing elements to define a processing web;~~

wherein at least one of said plurality of processing elements having an update input pin responds to the activation of said update input pin to request processing from an upstream one of

said ~~plurality of plural~~ processing elements that does not have an update input pin and that is idle until receipt of said request, so that upon said request, the upstream processing element performs said requested processing to process a received ~~waveform~~-data, and provide the processed ~~waveform~~-data to the at least one requesting processing element.

44. (Currently Amended) The method of claim 43, wherein the upstream one of said processing elements transmits the processed ~~waveform~~-data to the at least one of the ~~plurality of plural~~ processing elements requesting processed ~~waveform~~-data therefrom without an intervening buffer.

45-49 (Canceled)

50. (New) A method for configuring and performing processing in a digital oscilloscope of a type having plural operating elements for data flow processing of input data, said method comprising the steps of:

defining a processing web having plural processing elements, each processing element of the processing web corresponding to one or more of the operating elements of the digital oscilloscope;

providing an additional processing element for use with the processing web upon the addition of a corresponding operating capability to the digital oscilloscope, said additional processing element having at least one input pin and at least one output pin; and

including the additional processing element in the processing web, thereby incorporating the corresponding additional capability into the data flow processing by the digital oscilloscope,

by connecting one or more of said input and output pins of the additional processing element to the processing web.

51. (New) The method of claim 50, further comprising the step of removing a processing element from the processing web upon the removal of a corresponding capability from the digital oscilloscope.

52. (New) The method of claim 50, wherein the additional corresponding capability is provided by the addition of one or more hardware elements to the digital oscilloscope.

53. (New) The method of claim 50, wherein the additional corresponding capability is provided by the addition of one or more software elements for the data flow processing by the digital oscilloscope.

54. (New) The method of claim 50, wherein the processing web is generated dynamically upon startup of the digital oscilloscope.

55. (New) The method of claim 54, wherein changes to a configuration of the digital oscilloscope are manifested in the dynamically generated processing web.